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Washington, D.C. 20231 ATTORNEY DOCKET NO. FIRST NAMED INVENTOR FILING DATE SERIAL NUMBER 94CR110GGW WINKER 09/30/94 08/313.532 EXAMINER RICE E5M1/0907 PAPER NUMBER **ART UNIT** GREGORY G WILLIAMS ROCKWELL INTERNATIONAL CORPORATION 400 COLLINS ROAD NE 2515 CEDAR RAPIDS IA 52498 DATE MAILED: 09/07/95 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS This application has been examined Responsive to communication filed on_____ This action is made final. _ days from the date of this letter.

_ month(s), _ Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133 Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION: Notice of Draftsman's Patent Drawing Review, PTO-948.
 Notice of Informal Patent Application, PTO-152. Notice of References Cited by Examiner, PTO-892. 3. Notice of Art Cited by Applicant, PTO-1449. C 2) 5. Information on How to Effect Drawing Changes, PTO-1474. Part II SUMMARY OF ACTION are pending in the application. 1. Claims 1-16 are withdrawn from consideration. 2. Claims_ 3. Claims _____ 4. Ctalms 1 - 1 6 are rejected. __ are objected to. 5. Claims ______ are subject to restriction or election requirement. 7. This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes. 8. Formal drawings are required in response to this Office action. . Under 37 C.F.R. 1.84 these drawings 9. The corrected or substitute drawings have been received on _ are-☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948). ____. has (have) been approved by the 10. The proposed additional or substitute sheet(s) of drawings, filed on ____ examiner; disapproved by the examiner (see explanation). 11. The proposed drawing correction, filed ____ 12. Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has been received not been received □ been filed in parent application, serial no. ______; filed on _ 13. Since this application apppears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213. 14. Other

EXAMINER'S ACTION

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The two pages before page 1 of the specification should be deleted and the TITLE added to page 1.

Content of Specification

(a) Title of the Invention. (See 37 C.F.R. § 1.72(a)).

The title of the invention should be placed at the top of the first page of the specification. It should be brief but technically accurate and descriptive, preferably from two to seven words.

(b) Cross-References to Related Applications: See 37 C.F.R. § 1.78 and section 201.11 of the M.P.E.P.

(c) Statement as to rights to inventions made under Federally sponsored research and development (if any): See section 310 of the M.P.E.P.

(d) Background of the Invention: The specification should set forth the Background of the Invention in two parts:

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field".
- (2) Description of the Related Art: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art".
- (e) Summary: A brief summary or general statement of the invention as set forth in 37 C.F.R. § 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (f) Brief Description of the Drawing(s): A reference to and brief description of the drawing(s) as set forth in 37 C.F.R. § 1.74.

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Description of the Preferred Embodiment(s): A (g) description of the preferred embodiment(s) of the invention as required in 37 C.F.R. § 1.71. description should be as short and specific as is necessary to describe the invention adequately and accurately. This item may also be titled "Best Mode for Carrying Out the Invention". Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(h) Claim(s) (See 37 C.F.R. § 1.75): A claim may be typed with the various elements subdivided in paragraph form. There may be plural indentations to further segregate

subcombinations or related steps.

(i) Abstract: A brief narrative of the disclosure as a whole in a single paragraph of 250 words or less.

A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim. See M.P.E.P. \$608.01(n).

Claims 2 and 7-10 are objected to for the reasons given below.

In claim 2, the colon at the end of the claim should be deleted for proper English.

In claim 8, the item (c) should have an --and-- at the end for proper English.

In claims 7-10, particular elements are indicated by the claim in which it is first recited. This is not dependency per

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se, rather it is description. This description (\$5. improper for various reasons including because it causes violation of "a dependent claim refers to a preceding claim".

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. \S 103 as being unpatentable over Haas (5375006).

Haas teaches a positive birefringent O-plate compensator and a positive birefringent A-plate compensator in figure 6a (also see lines 64-65 of column 4). The device includes, in the following order, a polarizer 2, an A-plate 11a, an O-plate 11b, a substrate 3, a liquid crystal layer, a substrate 4 and a polarizer 5. The elements are on top of each other. Haas does not discuss how the compensators are formed (deposited).

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The terms "monolithic" and/or "deposited" are used in the The specification, at the top of page 15, states "the claims. term 'monolithic' is meant to imply that the ... compensator layers are formed by depositing one layer on top of another layer; with or with out the use of surface modification treatments such as adhesion layers" and the specification, at the top of page 19, states "the term 'deposition' here is intended to be distinct from lamination, in which pre-formed compensator layers are glued or otherwise bonded to the substrate". Since the compensators could, for example, be either pre-formed or not pre-formed and then glued or bonded to a substrate, one of ordinary skill could not necessarily determine from the product if a compensator layer was pre-formed. Accordingly, the limitations of "monolithic" and "deposited" are, in part, process limitations. (Monolithic provides the structural limitation that the compensator layers are on top of each other.)

In re Dike, 394 F.2d 584, 157 USPQ 581 (CCPA 1968), states that a process limitation cannot impart patentability to product claim where product is not patentably distinguished over prior art. Since Haas includes all of the structural limitations of claims 1-5 and 7-9, and since a process limitation cannot impart patentability to product claim where product is not patentably distinguished over prior art, claims 1-5 and 7-9 are not patentable in view of Haas.

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Claims 6 and 10 are rejected under 35 U.S.C. § 103 as being unpatentable over Haas as applied to claims 1-5 and 7-9 above, and further in view of Penz et al. (4533214).

Haas does not disclose the substrate adjacent the compensator is also the polarizer.

Penz et al. teach the use of a polarizer as both the polarizer and the substrate to reduce both thickness and cost. See lines 58-61 of column 1.

It would have been obvious to one of ordinary skill in the liquid crystal art to substitute the combined polarizer and substrate of Penz for the polarizer of Haas and to eliminate the substrate of Haas to reduce the thickness and the cost of the device.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mori (JP 6-174920) and Okumura (JP 5-157913) teach an Oplate compensator.

Soref et al. (4516837) a monolithic device including retardation plates in lines 57-62 of column 10.

Harris et al. (5344916) is cited in the specification.

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Any inquiry concerning this communication should be directed to Ron Trice at telephone number (703) 308-4117.

Ron Trice Patent Examiner August 30, 1995

Ron Luce Ron Trice Group 2500